

Leukaemia Section

Short Communication

t(2;8)(p15;q24) BCL11A/MYC

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Abstract

Review on t(2;8)(p15;q24) BCL11A/MYC, with data on clinics, and the genes implicated.

Clinics and pathology

Disease

Diffuse large B-cell lymphoma (DLBCL)

Epidemiology

There was one female patient, and a male patient aged 81 years (Aamot et al., 2007; Bertrand et al., 2007).

Prognosis

One patient died before treatment (Bertrand et al., 2007).

Cytogenetics

Cytogenetics morphological

A t(14;18)(q32;q21) was present in both cases. One case also presented with +5, +7, +12, and a marker chromosome.

Genes involved and proteins

Note

In the case described by Bertrand et al., 2007, breakpoints occurred close to MYC and BCL11A.

BCL11A

Location

2p16

Protein

BCL11A is a Krüppel zinc-finger transcription factor, which has been shown to be essential for pre-B-cell development, thymocyte maturation, and globin switching, expressed in haematopoietic and neural tissues. BCL11A controls FLT3 and IL7R expression in early hematopoietic progenitors (Wu et al., 2013).

MYC

Location

8q24.2

Protein

DNA binding protein. Binds DNA as a heterodimer with MAX. Involved in various cellular processes including cell growth, proliferation, cell adhesion, apoptosis, angiogenesis, and stem cell behaviour modulation.

References

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